ABSTRACT OF THE DISCLOSURE

A feature of a wavelength conversion device of this invention is the board range of selection of wavelengths which can be obtained by conversion. A wavelength conversion device of this invention comprises an SC light generation portion 12, which receives an excitation light pulse output from an excitation light pulse source and generates SC light, and an optical wavelength filter 14 which filters the SC light. An excitation light pulse source generates an excitation light pulse, of central wavelength λ_S. When the excitation light pulse generated by the excitation light pulse source is incident on the SC medium, SC light having a flat spectral shape over the range from wavelength λ_L to wavelength λ_H (where $\lambda_L<\lambda_H$) is generated. The optical wavelength filter has a characteristic such that the filtering transmitted central wavelengths are λ_1, λ_2, λ_3, ..., λ_n (where n is a natural number). A further feature is that the following conditions (1) and (2-1), (2-2), ..., (2-n) between the wavelength λ_L, the wavelength λ_H, the wavelength λ_S, and the wavelengths λ_1, λ_2, λ_3, ..., λ_n (where n is a natural number) are satisfied.

$$\lambda_L < \lambda_S < \lambda_H \qquad (1)$$

$$\lambda_L < \lambda_1 < \lambda_H \qquad (2\text{-}1)$$

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$$\lambda_L < \lambda_n < \lambda_H \qquad (2\text{-}n)$$